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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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04/16/2004

James F. Nagy

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8904

27874

7590

03/21/2005

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EXAMINER

SHAFFER, RICKY D

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/825,903	NAGY, JAMES F.	
	Examiner	Art Unit	
	Ricky D. Shafer	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>04/16/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election with traverse of the species "A", the light dispersing medium being a solid, in the reply filed on February 22, 2005 is acknowledged. The traversal would appear to be on the ground(s) that the species are sufficiently related that there would be no undue burden to examine the non-elected species along with the elected species. This is not found persuasive because the restriction requirement set forth in the communication mailed on February 21, 2005 is based on the claimed structural differences between the various species and not on their similarities. Continued search and examination of claim(s) to a non-elected species having substantially different structural limitations is a prima facie showing of burden. Applicant may overcome the requirement for restriction by presenting an allowable linking claim or by providing a clear admission on the record that the claim(s) drawn to a given non-elected species is not patentably distinct from the elected species.

Please note that 37 CFR 1.141(a) clearly states that more than one species of an invention may be claimed in an application, provided that the application includes an allowable generic (linking) claim to all the claimed species and all the claims to species in excess of one are written in dependent form or otherwise include all the limitations of the generic (linking) claim.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 11-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species. Applicant timely traversed the restriction (election) requirement in the reply filed on February 22, 2005.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Moultrie ('927).

Moultrie discloses an optical assembly comprising at least one prismatic element, wherein said prismatic element comprises a reflective surface (15); at least one optical window (12) set at a predetermined angle to said reflective surface, wherein said predetermined angle is about 30 degrees (see column 3, lines 13 to 15), an a light dispersing medium (the liquid) disposed between said optical window and said reflective surface, and at least one source of light (sun light), wherein said light includes wavelengths within the visible spectrum. Note figures 1 to 4 along with the associated description thereof.

5. Claims 1, 6 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Miller ('334).

Miller discloses an optical assembly comprising at least one prismatic element (10), wherein said prismatic element comprises a substantially solid light dispersing medium (see column 3, lines 54 to 56); a highly reflective surface (22) attached to said light dispersing medium, and a window (21) formed in said light dispersing medium at a predetermined angle relative to said reflective surface, and wherein said angle of said reflective surface relative to said window is fixed; and at least one source of light, wherein said light is within the visible spectrum (see column 1, lines 8 to 13). Note figures 1 to 2 along with the associated description thereof.

6. Claims 1, 6, 7 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Pickering ('183).

Pickering discloses an optical assembly comprising at least one prismatic element, wherein said prismatic element comprises a substantially solid light dispersing medium (see column 1, lines 55 to 57); a highly reflective surface [52(31)] attached to said light dispersing medium, and a window (51) formed in said light dispersing medium at a predetermined angle relative to said reflective surface, and wherein said angle of said reflective surface relative to said window is fixed, wherein said prismatic element is a triangular in shape and said triangular shape is a 30-60-90 degrees triangle; and at least one source of light (10,11,12), wherein said light is within the visible spectrum. Note figures 1 to 4 along with the associated description thereof.

7. Claims 1, 6, 10 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Macleish ('899).

Macleish discloses an optical assembly comprising at least one prismatic element (42), wherein said prismatic element comprises a substantially solid light dispersing medium (see column 5, lines 28 to 33); a highly reflective surface (44) attached to said light dispersing medium, and a window (43) formed in said light dispersing medium at a predetermined angle relative to said reflective surface, and wherein said angle of said reflective surface relative to said window is at an of about 30 degrees (see column 8, lines 20 to 24); and at least one source of light (12), wherein said light is within the visible spectrum (see column 1, lines 1 to 5). Note figures 1, 2 and 11 along with the associated description thereof.

8. Claims 1, 2, 6, 8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Miller ('499).

Miller discloses an optical assembly comprising multiple prismatic elements (12,14), stacked atop one another, wherein each said prismatic element comprises a substantially solid

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light dispersing medium (see column 1, line 68 to column 2, line 4, column 5, lines 54 to 63 and column 6, lines 18 to 23) of glass (see column 3, lines 63 to 67); a highly reflective surface (16,20) attached to said light dispersing medium, and a window (26,32) formed in said light dispersing medium at a predetermined angle relative to said reflective surface, and wherein said angle of said reflective surface relative to said window is fixed; and at least one source of light (sun light), wherein said light includes wavelengths within the visible spectrum (see column 1, lines 8 to 13), wherein . Note figures 1, 5, 7, 9 and 10 along with the associated description thereof.

9. Claims 1-6 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Staunton ('617).

Staunton discloses an optical assembly comprising an array of prismatic elements [(19,16b), (20,16c to 16g)], wherein said prismatic elements are stacked on top of one another (see Fig. 7) or are arranged in a semi-arc relative to one another (see figures 8 and 9) having a frame (the matrix material) and wherein said prismatic element comprises a substantially solid light dispersing medium (see column 1, lines 33 to 40) of quartz or quartz and glass (see column 5, lines 34 to 40 and column 5, line 63 to column 6, line 46); a highly reflective surface [(18b to 18g) and column 7, lines 24 to 43] attached to said light dispersing medium, and a window (14b to 14g) formed in said light dispersing medium at a predetermined angle relative to said reflective surface, and at least one source of light, wherein said light is within the visible spectrum (see column 1, lines 9 to 21 and column 5, line 65 to column 6, line 6), wherein said the prismatic elements are fabricated from a plate glass mirror (see Fig. 11) and wherein the

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window is a highly polished surface (see column 4, lines 13 to 15 and column 8, lines 30 to 36).

Note figures 1 to 11 along with the associated description thereof.

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller ('334) or Macleish ('899) in view of Beloian ('608).

Miller and Macleish each disclose all of the subject matter claimed, note the above explanation, except for explicitly stating the material used for the light dispersing medium.

Beloian teaches it is well known to use a quartz material or the like for a prismatic element in the same field of endeavor for the purpose of spectrally dispersing light.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the light dispersing material of Miller or Macleish to include quartz as is commonly used and employed in the art as clearly taught by Beloian in order to spectrally disperse light.

As to the limitations of claim 9, it is well known to highly polish, light incident optical surfaces in the same field of endeavor for the purpose of reducing the scattering of incident light.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the time was made to modify the window of Miller or Macleish to include a highly polished window in order to reduce the amount of surface scattering.

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12. Claims 1 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beloian ('608) in view of Miller ('334) or Macleish ('899).

Beloian discloses an optical assembly comprising at least one prismatic element (14), wherein said prismatic element comprises a substantially solid light dispersing medium of quartz (see column 2, lines 52 to 54); a highly reflective surface (22) attached to said light dispersing medium, and a window (21) formed in said light dispersing medium at a predetermined angle relative to said reflective surface, and wherein said angle of said reflective surface relative to said window is fixed; and at least one source of light, note figures 1 to 2 along with the associated description thereof, except for explicitly stating that the light is within the visible spectrum.

Miller and Macleish each teach it is well known to use light within the visible spectrum for monochromators in the same field of endeavor for the purpose of spatially separating colors.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the time was made to modify the light of Beloian to include light within the visible spectrum, as taught by Miller or Macleish, in order to spatially separate light of different colors within the visible spectrum.

As to the limitations of claim 5, it is well known to fabricate prismatic elements from a plate glass mirror in the same field of endeavor for the purpose of obtaining a reflective prism element.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the time was made to fabricate the prismatic element of Beloian from a plate glass mirror in order to reduce manufacturing costs.

As to the limitations of claim 7, it is well known to manufacture prismatic elements having a triangular shape, wherein said triangular shape is a 30-60-90 degree triangle.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the triangular shaped prism of Beloian to include a typical 30-60-90 degree triangle, as common used and employed in the art, in order to reduce manufacturing costs.

Moreover, since applicant has not disclosed that the 30-60-90 degree triangle solves any stated problem, it would appear that the invention would perform equally well with the triangular shape illustrated by Beloian. Note: In re Kuhle, 188 USPQ 7.

As to the limitations of claim 9, it is well known to highly polish, light incident optical surfaces in the same field of endeavor for the purpose of reducing the scattering of incident light.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the time was made to modify the window of Beloian to include a highly polished window in order to reduce the amount of surface scattering.

13. Claims 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Staunton ('617)

Staunton discloses all of the subject matter claimed, note the above explanation, except for explicitly stating that the triangular shape of the prismatic element(s) is a 30-60-90 degree triangle.

It is well known to manufacture prismatic elements having a triangular shape, wherein said triangular shape is a 30-60-90 degree triangle.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the triangular shaped prismatic element(s) of Staunton to include a typical 30-60-90 degree triangle, as common used and employed in the art, in order to reduce manufacturing costs.

Moreover, since applicant has not disclosed that the 30-60-90 degree triangle solves any stated problem, it would appear that the invention would perform equally well with the triangular shape illustrated by Staunton. Note: In re Kuhle, 188 USPQ 7.

14. Claim 7 is objected to because of the following informalities:

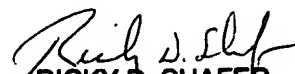
In claim 7, line 1, the language "said triangle" should be change to read --said triangular shape--. Appropriate correction is required.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricky D. Shafer whose telephone number is (571) 272-2320. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RDS

March 15, 2005


RICKY D. SHAFER
PATENT EXAMINER
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